

# Gastrointestinal Malignant Tumours: Are They Increasing?

Pages with reference to book, From 152 To 153

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Gastrointestinal tract is a major anatomical site for malignant tumours in humans<sup>1</sup>, with nearly one-fourth of cancer mortality attributed to them<sup>2</sup>. All these tumours, develop by a multistage carcinogenesis as evidenced by molecular, biological and genetic methods of analysis<sup>2</sup>. Most gastrointestinal tumours remain asymptomatic for long intervals and are far advanced, inoperable and many incurable at presentation or when diagnosed.<sup>2</sup> They exhibit considerable differences in incidence, histology and prognosis among the component sites of the digestive tract thus influencing the treatment plan. An increased incidence of adenocarcinoma of oesophagus<sup>3</sup>, gastric cardia, small intestine and a changing relative frequency of colorectal cancers and the pattern of sites of involvement have been reported<sup>4,5</sup>. Rectal adenocarcinoma and squamous cell carcinoma of oesophagus have remained stable while the rate of gastric adenocarcinoma has decreased over the years<sup>6</sup>. Overall black and non-white races have a higher incidence of almost all gastrointestinal cancers with few exceptions like oesophageal adenocarcinoma and rectal adenocarcinoma<sup>6</sup>. Recently gastrointestinal tumours accounted for almost 25% of new cancer cases reported annually with an equally frequent mortality and an altered trend in the site of predilection<sup>6</sup>. As a group these tumours are refractory to therapy once metastasis has occurred, thus giving only a palliative intent to supportive therapy. In this issue of the Journal the article "Frequency of gastrointestinal tumours at a local hospital in Karachi" shows an increasing frequency of malignant gastrointestinal tumours from 1961 to 1992; from 9.1% to 17.1% in males and from 8.9% to 16% in females. A similar trend has been reported from other centres of the country<sup>7</sup>. This rise is significantly higher when adjusted for increase in detection rate. These tumours, at present, are the most frequent ones among males and second commonest in females. They exhibit a much lower peak age in our population as compared to Caucasians<sup>6</sup>. The peak age, incidence, histologic variance, prognosis and survival in our population are closer to black population abroad<sup>6</sup>. Almost 49% cases were between 35-54 years and 24% between 55-64 years of age. Small number of cases over 65 years is due to a lower life expectancy in our country.

Possible reasons for increase in malignant tumours are attributed to life pattern, diet and environment. There have been over the decades changes in the life style and pattern, a more stressful life both psychologically and physically; sexually transmitted diseases and sexual practices; use of more purified and low residue diet, increased use of food preservatives and chemical processing, increasing use of alcohol and tobacco; insurgence of newer chemicals and newly developed drugs; water, air and environmental pollution; increased use of newly developed chemical fertilisers and insecticides in agriculture with undetermined longterm human toxicities; increasing nuclear contamination in atmosphere, more exposure to ionising radiation due to ozone depletion, newly emerging occupational hazards; changing viral universe with mutants and new oncogenic viral entities<sup>8-13</sup>. How these changes, factors and variables are translated in a catalyst for malignant change is yet to be explored in detail. There has been tremendous achievement in terms of diagnostic aids facilitating the accurate, early and prompt diagnosis of malignancy. Upper and lower GI endoscopy, endoscopic ultrasonography and ERCP (endoscopic retrograde cholangio-pancreatography) have made the direct visualization of oesophagus, stomach, duodenum, large intestine and pancreato-biliary tract a reality. This has also facilitated biopsy of previously unaccessible sites. Sonography has aided in analysing different aspects of solid masses and metastasis. CT scan and MRI have also helped tremendously in the diagnosis and evaluation of GI tumours and abdominal masses. Sonographic, CT scan, or MRI guided methods have

made an accurate biopsy retrieval from the desirable site a reality. One has also witnessed improvement in old time barium study techniques and a great deal of advancements in vascular invasive diagnostic techniques. A new field of interest and of great help has been the tumour markers like carcinoembryonic antigen (CEA) in colorectal, gastric, pancreatic and hepatobilia<sup>7</sup> carcinomas<sup>14</sup> CA-50 and T-4 in oesophageal carcinoma<sup>1</sup> polyamines, Lactate dehydrogenase and pepsinogen<sup>16-18</sup>; TAG-72 determination in colorectal carcinoma<sup>19</sup> etc. in the diagnosis, monitoring, recurrence and treatment planning. The rise in gastrointestinal tumours over the years is too high to be explained on the basis of population growth and increased rate of detection even when influencing variables and other factors are accounted for. The justifiable inference thus is that, the gastrointestinal tumours are increasing in reality. We have to be aware of it, be vigilant, keep eyes open, mind thinking and looking for it, exercise more screening and surveillance. Needless to say, one must emphasise on wider and extensive use of all available technology and investigational skills for an early tumour detection, a more successful treatment with sustainable remission and disease free survival. Lastly, an integrated primary and community health care is to be stressed strongly which can influence cancer related mortality and morbidity in our population.

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